

L5 1 SEA FILE=REGISTRY ABB=ON PLU=ON 26100-51-6/BI  
 L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON "POLY-L-LACTIC ACID"/CN  
 L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON L5 OR L6  
 L10 1 SEA FILE=REGISTRY ABB=ON PLU=ON 127514-57-2  
 L11 5470 SEA FILE=HCAPLUS ABB=ON PLU=ON L7 OR L10  
 L12 116 SEA FILE=HCAPLUS ABB=ON PLU=ON SACCHAROTHRIX+NT/CT  
 L13 141 SEA FILE=HCAPLUS ABB=ON PLU=ON SACCHAROTHRIX?/CT OR SACCHAROT  
     HRIX OR L12  
 L14 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L11 AND L13  
 L15 3 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND POLYLACT?  
 L17 4 SEA FILE=HCAPLUS ABB=ON PLU=ON L13 AND ?LACT?(3A) (POLY? OR  
     RESIN?)  
 L18 5 SEA FILE=HCAPLUS ABB=ON PLU=ON L14 OR L15 OR L17

=> d 118 ibib abs hitind hitstr 1-5

I,18 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:121755 HCAPLUS  
 DOCUMENT NUMBER: 139:3327  
 TITLE: **Poly(L-lactide)** degradation by  
       **Saccharothrix waywayandensis**  
 Jarerat, Amnat; Tokiwa, Yutaka  
 AUTHOR(S):  
 CORPORATE SOURCE: C.P.R Co., Ltd., Himeji, Hyogo, 670-0965, Japan  
 SOURCE: Biotechnology Letters (2003), 25(5), 401-404  
 CODEN: BILED3; ISSN: 0141-5492  
 PUBLISHER: Kluwer Academic Publishers  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 AB **Poly(L-lactide)** (PLA) was degraded by more than 95 mg  
     from 100 mg PLA film by an actinomycete, **Saccharothrix**  
     waywayandensis, growing in 100 mL liq. culture contg. 0.1% (w/v) gelatin.  
     In addn. to degrading PLA, this strain assimilated the major degrdn.  
     product of PLA, L-lactic acid.

CC 10-2 (Microbial, Algal, and Fungal Biochemistry)

ST **Saccharothrix polylactide** biodegrdn

IT Polymers, biological studies

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
     (biodegradable; **Poly(L-lactide)** degrdn. by  
     **Saccharothrix waywayandensis**)

IT Decomposition  
     (biodegrdn.; **Poly(L-lactide)** degrdn. by  
     **Saccharothrix waywayandensis**)

IT **Saccharothrix waywayandensis**  
     (**Poly(L-lactide)** degrdn. by **Saccharothrix**  
     waywayandensis)

IT 79-33-4, L-Lactic acid, biological studies 26161-42-2

RL: BSU (Biological study, unclassified); BIOL (Biological study)  
     (**Poly(L-lactide)** degrdn. by **Saccharothrix**  
     waywayandensis)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
     RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L18 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:29483 HCAPLUS  
 DOCUMENT NUMBER: 138:85598

TITLE: Isolation of **poly(lactic acid)**  
 degrading enzyme and proteinase K-like protease from  
 bacteria  
 INVENTOR(S): Tokiwa, Yutaka; Amnat, Jallerat; Tsuchiya, Akito  
 PATENT ASSIGNEE(S): National Institute of Advanced Industrial Science and  
 Technology, Japan; Almighty K. K.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PRIORITY APPLN. INFO.:	JP 2003009855	A2	20030114	JP 2001-248343	20010817
				JP 2001-133588	A 20010427
AB	A method for isolation of <b>poly(lactic acid)</b> degrading enzyme and proteinase K-like protease from bacteria by culturing them in the presence of glycine-contg. oligopeptide, alanine-contg. oligopeptide, valine-contg. oligopeptide, valine, alanine, glycine, gelatin, soybean, collagen, elastin, keratin, silk fibroin, or its hydrolysis products, is provided.				
IC	ICM	C12N009-18			
	ICS	C12N009-50; C12N009-18; C12R001-00; C12R001-01; C12R001-44; C12R001-465; C12R001-645; C12R001-07			
CC	7-2 (Enzymes)				
ST	Section cross-reference(s): 9, 10				
ST	<b>poly lactate</b> degrading enzyme proteinase K like protease bacteria				
IT	Soybean (Glycine max) (culturing bacteria in the presence of; isolation of <b>poly(lactic acid)</b> degrading enzyme and proteinase K-like protease from bacteria)				
IT	Collagens, uses Elastins Fibroin Gelatins, uses Keratins RL: MOA (Modifier or additive use); USES (Uses) (culturing bacteria in the presence of; isolation of <b>poly(lactic acid)</b> degrading enzyme and proteinase K-like protease from bacteria)				
IT	Amycolatopsis Amycolatopsis orientalis Bacillus (bacterium genus) Kibdelosporangium Lentzea Saccharomonospora Saccharopolyspora <b>Saccharothrix</b> <b>Saccharothrix waywayandensis</b> Staphylococcus Streptoalloteichus Streptomyces Tritirachium Tritirachium album				

(isolation of **poly(lactic acid)** degrading enzyme and proteinase K-like protease from bacteria)

IT Peptides, uses  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (oligopeptides, culturing bacteria in the presence of; isolation of **poly(lactic acid)** degrading enzyme and proteinase K-like protease from bacteria)

IT 56-40-6, Glycine, uses 56-41-7, L-Alanine, uses 72-18-4, L-Valine, uses 1948-31-8 3695-73-6 5874-90-8 22885-38-7 25191-17-7, Poly-alanine 25718-94-9, Poly-glycine  
 RL: MOA (Modifier or additive use); USES (Uses)  
 (culturing bacteria in the presence of; isolation of **poly(lactic acid)** degrading enzyme and proteinase K-like protease from bacteria)

IT 327029-50-5P, **Poly(L-lactate)** depolymerase  
 RL: PUR (Purification or recovery); PREP (Preparation)  
 (isolation of **poly(lactic acid)** degrading enzyme and proteinase K-like protease from bacteria)

IT 39450-01-6P, Proteinase K  
 RL: PUR (Purification or recovery); PREP (Preparation)  
 (protease like; isolation of **poly(lactic acid)** degrading enzyme and proteinase K-like protease from bacteria)

L18 ANSWER 3 OF 5 HCPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2003:29478 HCPLUS  
 DOCUMENT NUMBER: 138:54649  
 TITLE: Inducers for enhanced **polylactic** acid-degrading enzyme production and degradation of **polylactic** acid  
 INVENTOR(S): Tokiwa, Yutaka; Jarelaht, Amnatto; Tsuchiya, Akito  
 PATENT ASSIGNEE(S): National Institute of Advanced Industrial Science and Technology, Japan; Almighty K. K.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2003009846	A2	20030114	JP 2001-248341	20010817
PRIORITY APPLN. INFO.:			JP 2001-133588	A 20010427
AB Biodegradable <b>polylactic</b> acid is degraded with microorganism producing <b>polylactic</b> acid-degrading enzyme and/or proteinase K-like protease. Inducers such as glycine-contg. oligopeptides are used for promotion of enzyme prodn. of the microorganism.				
IC	ICM C12N001-14			
	ICS C12N001-14; B09B003-00; C12N001-20; C12N009-52; C12N009-54; C12R001-645; C12R001-01; C12R001-465; C12R001-07; C12R001-44			
CC	16-4 (Fermentation and Bioindustrial Chemistry)			
ST	Section cross-reference(s): 60			
IT	<b>polylactate</b> degrdn enzyme proteinase manuf inducer oligopeptide Polymers, occurrence			
	RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process)			
	(biodegradable; inducers for enhanced <b>polylactic</b>			

acid-degrading enzyme prodn. and degrdn. of **polylactic** acid)  
 IT Remediation  
     (bioremediation; inducers for enhanced **polylactic**  
     acid-degrading enzyme prodn. and degrdn. of **polylactic** acid)  
 IT Fibroin  
   RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
   (Uses)  
     (hydrolyzates; inducers for enhanced **polylactic**  
     acid-degrading enzyme prodn. and degrdn. of **polylactic** acid)  
 IT Amycolatopsis  
   Amycolatopsis orientalis  
   Bacillus (bacterium genus)  
   Fermentation  
   Kibdelosporangium  
   Lentzea  
   Saccharomonospora  
   Saccharopolyspora  
     **Saccharothrix**  
     **Saccharothrix waywayandensis**  
   Staphylococcus  
   Streptoalloteichus  
   Streptomyces  
   Tritirachium  
   Tritirachium album  
     (inducers for enhanced **polylactic** acid-degrading enzyme  
     prodn. and degrdn. of **polylactic** acid)  
 IT Collagens, biological studies  
   Elastins  
   Fibroin  
   Gelatins, biological studies  
   RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
   (Uses)  
     (inducers for enhanced **polylactic** acid-degrading enzyme  
     prodn. and degrdn. of **polylactic** acid)  
 IT Peptides, biological studies  
   RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
   (Uses)  
     (oligopeptides; inducers for enhanced **polylactic**  
     acid-degrading enzyme prodn. and degrdn. of **polylactic** acid)  
 IT Protein hydrolyzates  
   RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
   (Uses)  
     (soya; inducers for enhanced **polylactic** acid-degrading enzyme  
     prodn. and degrdn. of **polylactic** acid)  
 IT 556-33-2, Glycyl glycyl glycine 686-43-1, Valyl glycine 1948-31-8  
   1963-21-9, Glycyl valine 3695-73-6, Glycyl alanine 5874-90-8, Alanyl  
   alanyl alanine 19729-30-7, Glycyl glycyl alanine 28112-97-2, Glycyl  
   valyl glycine  
   RL: BUU (Biological use, unclassified); BIOL (Biological study); USES  
   (Uses)  
     (inducers for enhanced **polylactic** acid-degrading enzyme  
     prodn. and degrdn. of **polylactic** acid)  
 IT 26023-30-3, Poly[oxy(1-methyl-2-oxo-1,2-ethanediyl)]  
   RL: POL (Pollutant); RCT (Reactant); OCCU (Occurrence); RACT (Reactant or  
   reagent)  
     (inducers for enhanced **polylactic** acid-degrading enzyme  
     prodn. and degrdn. of **polylactic** acid)

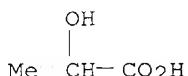
IT 56-40-6, Glycine, biological studies 56-41-7, L-Alanine, biological studies 72-18-4, Valine, biological studies  
 RL: BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (oligopeptide contg.; inducers for enhanced **polylactic** acid-degrading enzyme prodn. and degrdn. of **polylactic** acid)  
 IT 39450-01-6P  
 RL: BPN (Biosynthetic preparation); CAT (Catalyst use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (protease; inducers for enhanced **polylactic** acid-degrading enzyme prodn. and degrdn. of **polylactic** acid)  
 IT 9001-92-7P, Protease  
 RL: BPN (Biosynthetic preparation); CAT (Catalyst use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (proteinase k-like; inducers for enhanced **polylactic** acid-degrading enzyme prodn. and degrdn. of **polylactic** acid)

L18 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2001:65454 HCAPLUS  
 DOCUMENT NUMBER: 134:120267  
 TITLE: **Saccharothrix** for degradation of **polylactate resin**  
 INVENTOR(S): Tokiwa, Yutaka  
 PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan  
 SOURCE: Jpn. Tokkyo Koho, 6 pp.  
 CODEN: JTXXFF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 3128577	B1	20010129	JP 1999-313578	19991104
JP 2001128693	A2	20010515		
WO 2001032902	A1	20010510	WO 2000-JP2113	20000331
W: CA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1227158	A1	20020731	EP 2000-913053	20000331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2001128667	A2	20010515	JP 2000-158973	20000529
JP 3326495	B2	20020924		
JP 2001128668	A2	20010515	JP 2000-158974	20000529
JP 3326608	B2	20020924		
JP 2001128669	A2	20010515	JP 2000-158975	20000529
JP 3326496	B2	20020924		
JP 2001128670	A2	20010515	JP 2000-158976	20000529
JP 3326497	B2	20020924		
JP 2001128671	A2	20010515	JP 2000-158977	20000529
JP 3326498	B2	20020924		
PRIORITY APPLN. INFO.:			JP 1999-313578	A 19991104
			WO 2000-JP2113	W 20000331

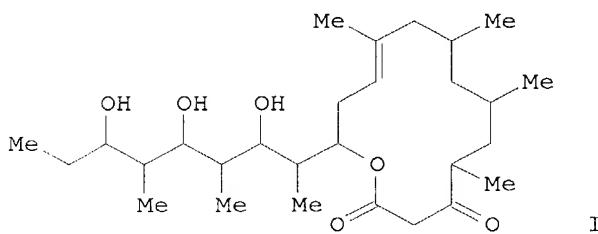
AB Biodegradable **polylactate resin** is degraded with **Saccharothrix**. The method does not give waste gas, and is time-saving and useful for composting.

IC ICM C12P001-06  
 ICS C12N001-20; C12S013-00  
 CC 60-4 (Waste Treatment and Disposal)  
 ST **Saccharothrix polylactate resin** degrdn  
 IT Compost  
*Crossiella cryophila*  
*Saccharothrix*  
*Saccharothrix aerocolonigenes aerocolonigenes*  
*Saccharothrix australiensis*  
*Saccharothrix coeruleofusca*  
*Saccharothrix espanaensis*  
*Saccharothrix flava*  
*Saccharothrix longispora*  
*Saccharothrix mutabilis mutabilis*  
*Saccharothrix syringae*  
*Saccharothrix texensis*  
*Saccharothrix waywayandensis*  
 (Saccharothrix for degrdn. of **polylactate resin**)  
 IT **Resins**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)  
 (polylactate; **Saccharothrix** for degrdn. of **polylactate resin**)  
 IT 26100-51-6  
 RL: BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)  
 (resin; **Saccharothrix** for degrdn. of **polylactate resin**)  
 IT 26100-51-6  
 RL: BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)  
 (resin; **Saccharothrix** for degrdn. of **polylactate resin**)  
 RN 26100-51-6 HCAPLUS  
 CN Propanoic acid, 2-hydroxy-, homopolymer (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 50-21-5  
 CMF C3 H6 O3



L18 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1992:420019 HCAPLUS  
 DOCUMENT NUMBER: 117:20019  
 TITLE: Isolation and structural elucidation of sekothrixide,  
 a new macrolide effective to overcome drug-resistance  
 of cancer cells  
 AUTHOR(S): Kim, Yoon Jeong; Furihata, Kazuo; Shimazu, Akira;  
 Furihata, Keiko; Seto, Haruo

CORPORATE SOURCE: Inst. Appl. Microbiol., Univ. Tokyo, Tokyo, 113, Japan  
 SOURCE: Journal of Antibiotics (1991), 44(11), 1280-2  
 DOCUMENT TYPE: CODEN: JANTAJ; ISSN: 0021-8820  
 LANGUAGE: Journal  
 English  
 GT



AB The prodn. and isolation of a new macrolide, named sekothrixide (I), which has cytoidal activity in the presence of colchicine, are reported. The producing microorganism, *Saccharothrixide* CF24, was isolated from soil. I was demonstrated by mass and NMR spectral anal. to be a 14-membered *.beta.-ketolactone* with a long, **polyoxygenated** side chain. Its relative and abs. configurations were not detd. I has neither antibacterial nor antifungal activity, but acted synergistically with colchicine against multidrug-resistant KB-C2 cells.

CC 1-6 (Pharmacology)  
 Section cross-reference(s): 10, 26

IT **Saccharothrix**  
 (sekothrixide from)

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6 FILES SEARCHED...  
17 FILES SEARCHED...  
L26 32 L25

=> d que

L25 QUE ABB=ON PLU=ON SACCHAROTHRIX? AND (POLYLACT? OR POL  
Y-L-LACT?)  
L26 32 SEA L25

=> dup rem 126

PROCESSING COMPLETED FOR L26

L27 14 DUP REM L26 (18 DUPLICATES REMOVED)  
ANSWERS '1-4' FROM FILE CAPLUS  
ANSWERS '5-8' FROM FILE USPATEFULL  
ANSWERS '9-10' FROM FILE EUROPATFULL  
ANSWERS '11-12' FROM FILE INPADOC  
ANSWER '13' FROM FILE PASCAL  
ANSWER '14' FROM FILE PCTFULL

=> d bib ab 127 1-14

L27 ANSWER 1 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 1  
AN 2003:29483 CAPLUS  
DN 138:85598

TI Isolation of poly(lactic acid) degrading enzyme and proteinase K-like  
protease from bacteria

IN Tokiwa, Yutaka; Amnat, Jallerat; Tsuchiya, Akito  
PA National Institute of Advanced Industrial Science and Technology, Japan;  
Almighty K. K.

SO Jpn. Kokai Tokkyo Koho, 10 pp.  
CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
	-----	-----	-----	-----	-----
PI	JP 2003009855	A2	20030114	JP 2001-248343	20010817
PRAI	JP 2001-133588	A	20010427		
AB	A method for isolation of poly(lactic acid) degrading enzyme and proteinase K-like protease from bacteria by culturing them in the presence of glycine-contg. oligopeptide, alanine-contg. oligopeptide, valine-contg.				

oligopeptide, valine, alanine, glycine, gelatin, soybean, collagen, elastin, keratin, silk fibroin, or its hydrolysis products, is provided.

L27 ANSWER 2 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 2  
 AN 2003:29478 CAPLUS  
 DN 138:54649  
 TI Inducers for enhanced **polylactic** acid-degrading enzyme production and degradation of **polylactic** acid  
 IN Tokiwa, Yutaka; Jarelaht, Amnatto; Tsuchiya, Akito  
 PA National Institute of Advanced Industrial Science and Technology, Japan; Almighty K. K.  
 SO Jpn. Kokai Tokkyo Koho, 11 pp.  
 CODEN: JKXXAF  
 DT Patent  
 LA Japanese  
 FAN.CNT 2

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	-----	-----	-----	-----
PI JP 2003009846	A2	20030114	JP 2001-248341	20010817
PRAI JP 2001-133588	A	20010427		

AB Biodegradable **polylactic** acid is degraded with microorganism producing **polylactic** acid-degrading enzyme and/or proteinase K-like protease. Inducers such as glycine-contg. oligopeptides are used for promotion of enzyme prodn. of the microorganism.

L27 ANSWER 3 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 3  
 AN 2003:121755 CAPLUS  
 DN 139:3327  
 TI **Poly(L-lactide)** degradation by **Saccharothrix** waywayandensis  
 AU Jarerat, Amnat; Tokiwa, Yutaka  
 CS C.P.R Co., Ltd., Himeji, Hyogo, 670-0965, Japan  
 SO Biotechnology Letters (2003), 25(5), 401-404  
 CODEN: BILED3; ISSN: 0141-5492  
 PB Kluwer Academic Publishers  
 DT Journal  
 LA English  
 AB **Poly(L-lactide)** (PLA) was degraded by more than 95 mg from 100 mg PLA film by an actinomycete, **Saccharothrix** waywayandensis, growing in 100 mL liq. culture contg. 0.1% (w/v) gelatin. In addn. to degrading PLA, this strain assimilated the major degrdn. product of PLA, L-lactic acid.

RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

L27 ANSWER 4 OF 14 CAPLUS COPYRIGHT 2004 ACS on STN DUPLICATE 6  
 AN 2001:65454 CAPLUS  
 DN 134:120267  
 TI **Saccharothrix** for degradation of **polylactate** resin  
 IN Tokiwa, Yutaka  
 PA Agency of Industrial Sciences and Technology, Japan  
 SO Jpn. Tokkyo Koho, 6 pp.  
 CODEN: JTXXFF  
 DT Patent  
 LA Japanese  
 FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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PI	JP 3128577	B1	20010129	JP 1999-313578	19991104
	JP 2001128693	A2	20010515		
	WO 2001032902	A1	20010510	WO 2000-JP2113	20000331
	W: CA, US RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
	EP 1227158	A1	20020731	EP 2000-913053	20000331
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
	JP 2001128667	A2	20010515	JP 2000-158973	20000529
	JP 3326495	B2	20020924		
	JP 2001128668	A2	20010515	JP 2000-158974	20000529
	JP 3326608	B2	20020924		
	JP 2001128669	A2	20010515	JP 2000-158975	20000529
	JP 3326496	B2	20020924		
	JP 2001128670	A2	20010515	JP 2000-158976	20000529
	JP 3326497	B2	20020924		
	JP 2001128671	A2	20010515	JP 2000-158977	20000529
	JP 3326498	B2	20020924		
PRAI	JP 1999-313578	A	19991104		
	WO 2000-JP2113	W	20000331		

AB Biodegradable **polylactate** resin is degraded with **Saccharothrix**. The method does not give waste gas, and is time-saving and useful for composting.

L27	ANSWER 5 OF 14 USPATFULL on STN				
AN	2000:64718 USPATFULL				
TI	Microorganism capable of degrading <b>polylactic</b> acid resin and method of degrading <b>polylactic</b> acid resin using said microorganism				
IN	Tokiwa, Yutaka, Tsuchiura, Japan Jikuya, Hiroyuki, Tsukuba, Japan Nagai, Naoko, Kameoka, Japan				
PA	Director-General of Agency of Industrial Science and Technology, Tokyo, Japan (non-U.S. corporation) Shimadzu Corp., Kyoto, Japan (non-U.S. corporation)				
PI	US 6066492	20000523			
AI	US 1999-233041	19990120 (9)			
RLI	Division of Ser. No. US 1997-942361, filed on 2 Oct 1997, now patented, Pat. No. US 5925556				
PRAI	JP 1996-262073	19961002			
	JP 1996-262074	19961002			
DT	Utility				
FS	Granted				
EXNAM	Primary Examiner: Saucier, Sandra E.; Assistant Examiner: Afremova, Vera				
LREP	Birch, Stewart, Kolasch & Birch, LLP				
CIMN	Number of Claims: 6				
ECL	Exemplary Claim: 1				
DRWN	7 Drawing Figure(s); 5 Drawing Page(s)				
LN.CNT	473				
CAS INDEXING IS AVAILABLE FOR THIS PATENT.					
AB	A microorganism belonging to the genus <i>Staphylococcus</i> or the genus <i>Streptomyces</i> which is capable of degrading a <b>polylactic</b> acid resin. A method of degrading a <b>polylactic</b> acid resin including a step of culturing a microorganism capable of degrading a <b>polylactic</b> acid resin in a medium containing a				

**polylactic acid resin.** In particular, the microorganisms *Streptomyces violaceusniger* FERM BP-6110 and *Streptomyces cyaneus* FERM BP-6111 are used.

L27 ANSWER 6 OF 14 USPATFULL on STN  
 AN 1999:81748 USPATFULL  
 TI Method of degrading **polylactic acid resin** using *staphylococcus hominis* and *staphylococcus epidermidis*  
 IN Tokiwa, Yutaka, Tsuchiura, Japan  
 Jikuya, Hiroyuki, Tsukuba, Japan  
 Nagai, Naoko, Kameoka, Japan  
 PA Agency of Industrial Science and Technology, Tokyo, Japan (non-U.S. government)  
 Shimadzu Corporation, Kyoto, Japan (non-U.S. corporation)  
 PI US 5925556 19990720  
 AI US 1997-942361 19971002 (8)  
 PRAI JP 1996-262073 19961002  
 JP 1996-262074 19961002  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Saucier, Sandra E.; Assistant Examiner: Afremova, Vera  
 LREP Birch, Stewart, Kolasch & Birch, LLP  
 CLMN Number of Claims: 11  
 ECL Exemplary Claim: 3  
 DRWN 7 Drawing Figure(s); 5 Drawing Page(s)  
 LN.CNT 485  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB A microorganism belonging to the genus *Staphylococcus* or the genus *Streptomyces* which is capable of degrading a **polylactic acid resin**. A method of degrading a **polylactic acid resin** including a step of culturing a microorganism capable of degrading a **polylactic acid resin** in a medium containing a **polylactic acid resin**. In particular, the microorganisms *Staphylococcus hominis* FERM BP-6108 and *Staphylococcus epidermidis* FERM BP-6109.

L27 ANSWER 7 OF 14 USPATFULL on STN  
 AN 1998:162664 USPATFULL  
 TI 15-hydroxy 6,9-hemiacetal erythromycin compounds  
 IN Harada, Setsuo, Kawanishi, Japan  
 Funabashi, Yasunori, Osaka, Japan  
 Inatomi, Nobuhiro, Osaka, Japan  
 Tanayama, Shigeharu, Osaka, Japan  
 Tanida, Seiichi, Kyoto, Japan  
 PA Takeda Chemical Corporation, Osaka, Japan (non-U.S. corporation)  
 PI US 5854407 19981229  
 AI US 1995-475557 19950607 (8)  
 RLI Division of Ser. No. US 1993-33777, filed on 19 Mar 1993, now patented, Pat. No. US 5470961  
 PRAI JP 1992-64243 19920319  
 JP 1992-152467 19920611  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Kight, John; Assistant Examiner: Lee, Howard C.  
 LREP Conlin, David G., Eisenstein, Ronald I. Dike, Bronstein, Roberts & Cushman, LLP  
 CLMN Number of Claims: 23

ECL Exemplary Claim: 1  
 DRWN 14 Drawing Figure(s); 14 Drawing Page(s)  
 LN.CNT 2053  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Disclosed are (1) a structurally novel 6,9-hemiacetal- erythromycin derivative having a hydroxyl group at at least one of the 14- and 15-positions br a salt thereof, which has an excellent gastrointestinal function promoting effect and is low in toxicity; (2) a process for preparing a 6,9-hemiacetal-erythromycin derivative having a hydroxyl group at at least one of the 14- and 15-positions or a salt thereof, which comprises reacting a 6,9-hemiacetal-erythromycin derivative or a salt thereof with an organism-derived oxidase; and (3) a gastrointestinal function promoting agent containing a 6,9-hemiacetal-erythromycin derivative having a hydroxyl group at at least one of the 14- and 15-positions or a salt thereof.

L27 ANSWER 8 OF 14 USPATFULL on STN  
 AN 95:105951 USPATFULL  
 TI 14 and/or 15-hydroxy 6,9 hemiacetal erythromycin derivatives  
 IN Harada, Setsuo, Kawanishi, Japan  
 Funabashi, Yasunori, Osaka, Japan  
 Inatomi, Nobuhiro, Osaka, Japan  
 Tanayama, Shigeharu, Osaka, Japan  
 Tanida, Seiichi, Kyoto, Japan  
 PA Takeda Chemical Ind., Ltd., Osaka, Japan (non-U.S. corporation)  
 Kitasato Kenkyushio, Tokyo, Japan (non-U.S. corporation)  
 PI US 5470961 19951128  
 AI US 1993-33777 19930319 (8)  
 PRAI JP 1992-64243 19920319  
 JP 1992-152467 19920611  
 DT Utility  
 FS Granted  
 EXNAM Primary Examiner: Robinson, Douglas W.; Assistant Examiner: Lee, Howard C.  
 LREP Conlin, David G., Eisenstein, Ronald I.  
 CLMN Number of Claims: 16  
 ECL Exemplary Claim: 1  
 DRWN 14 Drawing Figure(s); 14 Drawing Page(s)  
 LN.CNT 1967  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Disclosed are (1) a structurally novel 6,9-hemiacetal-erythromycin derivative having a hydroxyl group at at least one of the 14- and 15-positions or a salt thereof, which has an excellent gastrointestinal function promoting effect and is low in toxicity; (2) a process for preparing a 6,9-hemiacetal-erythromycin derivative having a hydroxyl group at at least one of the 14- and 15-positions or a salt thereof, which comprises reacting a 6,9-hemiacetal-erythromycin derivative or a salt thereof with an organism-derived oxidase; and (3) a gastrointestinal function promoting agent containing a 6,9-hemiacetal-erythromycin derivative having a hydroxyl group at at least one of the 14- and 15-positions or a salt thereof.

L27 ANSWER 9 OF 14 EUROPATFULL COPYRIGHT 2004 WILA on STN DUPLICATE 4  
 PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET  
 AN 1227158 EUROPATFULL ED 20020808 EW 200231 FS OS

TIEN METHOD FOR DEGRADING **POLYLACTATE** RESINS.  
 TIDE VERFAHREN ZUM ABBAU VON POLYLAKTATHARZEN.  
 TIFR PROCEDE DE DEGRADATION DE RESINES **POLYLACTATE**.  
 IN TOKIWA, Yutaka, 46-12, Sakuragaoka-cho, Tsuchiura-shi, Ibaraki 300-0832,  
 JP  
 PA National Institute of Advanced Industrial Science and Technology, 3-1,  
 Kasumigaseki 1-chome, Chiyoda-ku, Tokyo 100-8901, JP;  
 Tokiwa, Yutaka, 46-12, Sakuragaoka-cho, Tsuchiura-shi, Ibaraki 300-0832,  
 JP  
 PAN 3298250; 3327490  
 AG Maschio, Antonio, D Young & Co, 21 New Fetter Lane, London EC4A 1DA, GB  
 AGN 77501  
 OS BEPA2002064 EP 1227158 A1 0009  
 SO Wila-EPZ-2002-H31-T1a  
 DT Patent  
 LA Anmeldung in Japanisch; Veröffentlichung in Englisch;  
 Verfahren in Englisch  
 DS R AT; R BE; R CH; R CY; R DE; R DK; R ES; R FI; R FR; R GB; R GR; R IE;  
 R IT; R LI; R LU; R MC; R NL; R PT; R SE  
 PIT EPA1 EUROPÄISCHE PATENTANMELDUNG (Internationale Anmeldung)  
 PI EP 1227158 A1 20020731  
 OD 20020731  
 AI EP 2000-913053 20000331  
 PRAI JP 1999-313578 19991104  
 RLI WO 00-JP2113 000331 INTAKZ  
 WO 0132902 010510 INTPNR  
 ABEN The present invention provides novel microorganisms that directly  
 biodegrade **polylactide** resins and plastics containing the same  
 as well as a method therefor. Specifically, the present invention  
 provides a method for degrading **polylactide** resins, wherein  
 the **polylactide** resins are degraded by an actinomycete  
 belonging to the genus **Saccharothrix**, *Streptoalloteichus*,  
*Kibdelosporangium*, *Lentzea*, *Actinokineospora*, *Saccharomonospora*,  
*Saccharopolyspora*, or *Actinopolyspora*.

L27 ANSWER 10 OF 14 EUROPATFULL COPYRIGHT 2004 WILA on STN

PATENT APPLICATION - PATENTANMELDUNG - DEMANDE DE BREVET

AN 561413 EUROPATFULL UP 20000423 EW 199338 FS OS STA B  
 TIEN Erythromycin deriatives, preparation and use thereof.  
 TIDE Erythromycinderivate, ihre Herstellung und ihre Verwendung.  
 TIFR Derives d'erythromycin, leur preparation et leur utilisation.  
 IN Harada, Setsuo, 3-31, Seiwadainishi 2-chome, Kawanishi, Hyogo 666-01,  
 JP;  
 Funabashi, Yasunori, 12-410, 3 Kishibekita 5-chome, Suita, Osaka 564,  
 JP;  
 Inatomi, Nobuhiro, 2-920, 1 Yamazaki 2-chome, Shimamoto-cho,  
 Mishima-gun, Osaka 567, JP;  
 Tanayama, Shigeharu, 9-1, Sonoda-cho, Ibaraju,Osaka 567, JP;  
 PA Tanida, Seiichi, 20-20, Ichimonbashi, 2-chome, Nagaokakyo, Kyoto 617, JP  
 Takeda Chemical Industries, Ltd., 1-1 Doshomachi 4-chome, Chuo-ku,  
 Osaka-shi, Osaka 541, JP;  
 PAN KITASATO KENKYUSHO, 9-1, Shirokane 5 chome Minato-ku, Tokyo-to, JP  
 204702; 400420  
 AG von Kreisler, Alek, Dipl.-Chem. et al, Patentanwaelte von Kreisler,

Selting, Werner, Postfach 10 22 41, Bahnhofsvorplatz 1, D-50462 Koeln,  
 DE  
 AGN 12434  
 OS ESP1993062 EP 0561413 A1 930922  
 SO Wila-EPZ-1993-H38-T1a  
 DT Patent  
 LA Anmeldung in Englisch; Veroeffentlichung in Englisch  
 DS R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IE; R IT; R LI;  
 R LU; R NL; R PT; R SE  
 PIT EPA1 EUROPÄISCHE PATENTANMELDUNG  
 PI EP 561413 A1 19930922  
 OD 19930922  
 AI EP 1993-104504 19930319  
 PRAI JP 1992-64243 19920319  
 JP 1992-152467 19920611

## GRANTED PATENT - ERTEILTES PATENT - BREVET DELIVRE

AN 561413 EUROPATFULL ED 19970108 EW 199623 FS PS  
 TIEN Erythromycin derivatives, preparation and use thereof.  
 TIDE Erythromycinderivate, Herstellung und Verwendung davon.  
 TIFR Derives d'erythromycin, leur preparation et leur utilisation.  
 IN Harada, Setsuo, 3-31, Seiwadainishi 2-chome, Kawanishi, Hyogo 666-01,  
 JP;  
 Funabashi, Yasunori, 12-410, 3 Kishibekita 5-chome, Suita, Osaka 564,  
 JP;  
 Inatomi, Nobuhiro, 2-920, 1 Yamazaki 2-chome, Shimamoto-cho,  
 Mishima-gun, Osaka 567, JP;  
 Tanayama, Shigeharu, 9-1, Sonoda-cho, Ibaraju, Osaka 567, JP;  
 Tanida, Seiichi, 20-20, Ichimonbashi, 2-chome, Nagaokakyo, Kyoto 617, JP  
 PA Takeda Chemical Industries, Ltd., 1-1 Doshomachi 4-chome, Chuo-ku,  
 Osaka-shi, Osaka 541, JP;  
 KITASATO KENKYUSHO, 9-1, Shirokane 5 chome Minato-ku, Tokyo-to, JP  
 PAN 204702; 400420  
 AG von Kreisler, Alek, Dipl.-Chem. et al, Patentanwaelte von  
 Kreisler-Selting-Werner Postfach 10 22 41, 50462 Koeln, DE  
 AGN 12434  
 OS EPB1996037 EP 0561413 B1 960605  
 SO Wila-EPS-1996-H23-T1  
 DT Patent  
 LA Anmeldung in Englisch; Veroeffentlichung in Englisch  
 DS R AT; R BE; R CH; R DE; R DK; R ES; R FR; R GB; R GR; R IE; R IT; R LI;  
 R LU; R NL; R PT; R SE  
 PIT EPB1 EUROPÄISCHE PATENTSCHRIFT  
 PI EP 561413 B1 19960605  
 OD 19930922  
 AI EP 1993-104504 19930319  
 PRAI JP 1992-64243 19920319  
 JP 1992-152467 19920611  
 REP EP 213617 A EP 222186 A  
 EP 349100 A  
 ABEN Disclosed are (1) a structurally novel 6,9-hemiacetal-erythromycin  
 derivative having a hydroxyl group at at least one of the 14- and  
 15-positions or a salt thereof, which has an excellent gastrointestinal  
 function promoting effect and is low in toxicity; (2) a process for  
 preparing a 6,9- hemiacetal-erythromycin derivative having a hydroxyl  
 group at at least one of the 14- and 15-positions or a salt thereof,

which comprises reacting a 6,9-hemiacetal-erythromycin derivative or a salt thereof with an organism-derived oxidase; and (3) a gastrointestinal function promoting agent containing a 6,9-hemiacetal-erythromycin derivative having a hydroxyl group at at least one of the 14- and 15-positions or a salt thereof.

L27 ANSWER 11 OF 14 INPADOC COPYRIGHT 2004 EPO on STN DUPLICATE 7

LEVEL 1  
 AN 149796839 INPADOC ED 20010531 EW 200121 UP 20020806 UW 200231  
 TI METHOD FOR DEGRADING **POLYLACTATE** RESINS.  
 IN TOKIWA, YUTAKA  
 INS TOKIWA YUTAKA  
 INA JP  
 PA JAPAN AS REPRESENTED BY SECRETARY OF AGENCY OF INDUSTRIAL SCIENCE AND TECHNOLOGY; TOKIWA, YUTAKA  
 PAS JAPAN AS REPRESENTED BY SECRET; TOKIWA YUTAKA  
 PAA JP; JP  
 TL English; French  
 LA Japanese  
 DT Patent  
 PIT WO01 PUBL.OF THE INT.APPL. WITH INT.SEARCH REPORT  
 PI WO 2001032902 A1 20010510  
 DS RW: AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE  
     W: CA US  
 AI WO 2000-JP2113 A 20000331  
 PRAI JP 1999-313578 A 19991104  
 AB Novel microorganisms directly and biologically degrading **polylactate** resins and plastics containing the same and a method therefor. More particularly speaking, the above method is characterized by degrading **polylactate** resins by using actinomycetes belonging to the genus <i>Saccharothrix</i>, *Streptoalloteichus*, *Kibdelosporangium*, *Lentzea*, *Actinokineospora*, *Saccharomonospora*, *Saccharopolyspora*</i> or <i>Actinopolyspora</i>.

L27 ANSWER 12 OF 14 INPADOC COPYRIGHT 2004 EPO on STN

LEVEL 1  
 AN 204628305 INPADOC ED 20030513 EW 200319 UP 20030513 UW 200319  
 TI A METHOD FOR DEGRADING **POLYLACTIDE** RESINS.  
 IN TOKIWA, YUTAKA  
 INS TOKIWA YUTAKA  
 INA JP  
 PA NATIONAL INSTITUTE OF ADVANCED INDUSTRIAL SCIENCE AND TECHNOLOGY; TOKIWA, YUTAKA  
 PAS NAT INST OF ADVANCED IND SCIEN; TOKIWA YUTAKA  
 PAA JP; JP  
 TL English; French  
 LA English  
 DT Patent  
 PIT CAAA LAID-OPEN APPLICATION  
 PI CA 2385726 AA 20010510  
 AI CA 2000-2385726 A 20000331  
 PRAI JP 1999-313578 A 19991104  
 WO 2000-JP2113 W 20000331  
 AB Novel microorganisms directly and biologically degrading

**polylactate** resins and plastics containing the same and a method therefor. More particularly speaking, the above method is characterized by degrading **polylactate** resins by using actinomycetes belonging to the genus **Saccharothrix**, *Streptoalloteichus*, *Kibdelosporangium*, *Lentzea*, *Actinokineospora*, *Saccharomonospora*, *Saccharopolyspora* or *Actinopolyspora*.

L27 ANSWER 13 OF 14 PASCAL COPYRIGHT 2004 INIST-CNRS. ALL RIGHTS RESERVED.  
on STN  
DUPLICATE 5  
AN 2003-0218483 PASCAL  
CP Copyright .COPYRGT. 2003 INIST-CNRS. All rights reserved.  
TIEN Poly(L-lactide)-degrading activity in  
various actinomycetes  
AU JARERAT Amnat; PRANAMUDA Hardaning; TOKIWA Yutaka  
CS Cassava and Starch Technology Research Unit, Kasetsart University,  
Bangkok 10900, Thailand; Agency for Assessment and Application of  
Technology, Jakarta 10340, Indonesia; National Institute of Advanced  
Industrial Science and Technology (AIST), Tsukuba Central 6, 1-1-1  
Higashi, Tsukuba, Ibaraki 305-8566, Japan  
SO Macromolecular bioscience : (Print), (2002), 2(9), 420-428, 25 refs.  
ISSN: 1616-5187  
DT Journal  
BL Analytic  
CY Germany, Federal Republic of  
LA English  
AV INIST-27117, 354000110816770020  
AB The **poly(L-lactide)** (PLA)-degrading ability  
of actinomycetes obtained from culture collections was examined by the  
formation of clear zones on PLA-emulsified agar plates. Using 41 genera  
(105 strains) of actinomycetes with phylogenetic affiliations based on  
16S rRNA sequences, PLA degraders were found to be limited to members of  
the family Pseudonocardiaceae and related genera. They included  
*Amycolatopsis*, **saccharothrix**, *Lentzea*, *Kibdelosporangium*, and  
*Streptoalloteichus*. A large number of PLA degraders were widely  
distributed within the genus **Saccharothrix**. Most strains  
forming clear zones on PLA-emulsified agar plates also formed clear zones  
on silk fibroin agar plates. **Saccharothrix** species showed an  
ability to degrade PLA films and assimilate degradation products in  
liquid cultures. No significant change of the molecular weight and  
polydispersity (M.sub.w/M.sub.n) of the remaining film fragments was  
confirmed. After cultivation for two weeks, many irregular holes/pits on  
the surface of the film due to the colonization of microorganisms were  
observed by scanning electron microscopy.

L27 ANSWER 14 OF 14 PCTFULL COPYRIGHT 2004 Univentio on STN  
AN 1995029912 PCTFULL ED 20020514  
TIEN ERGOLINE DERIVATIVES AS ANALGESICS  
TIFR DERIVES D'ERGOLINE UTILISES COMME ANALGESIQUES  
IN TSUBOTANI, Shigetoshi;  
DOI, Takayuki;  
FUNABASHI, Yasunori  
PA TAKEDA CHEMICAL INDUSTRIES, LTD.;  
TSUBOTANI, Shigetoshi;  
DOI, Takayuki;  
FUNABASHI, Yasunori  
LA English  
DT Patent

PI WO 9529912 A1 19951109  
DS W: AM AU BB BG BR BY CA CN CZ EE FI GE HU IS KG KR KZ LK LR  
LT LV MD MG MN MX NO NZ PL RO RU SG SI SK TJ TT UA US UZ  
VN KE MW SD SZ UG AT BE CH DE DK ES FR GB GR IE IT LU MC  
NL PT SE BF BJ CF CG CI CM GA GN ML MR NE SN TD TG  
AI WO 1995-JP812 A 19950425  
PRAI JP 1994-6/114079 19940429  
JP 1994-6/306649 19941209  
ABEN An analgic agent which comprises a compound of general formula (I),  
wherein each of R1 and R2  
is a hydrogen atom or an optionally substituted hydrocarbon group; R3 is  
a lower alkyl group; rings  
A and B may optionally be substituted; ring D is further substituted  
with an optionally substituted  
hydroxyl group and may optionally be substituted with an oxo group,  
wherein a double bond is formed  
between the positions 8 and 9 or between the positions 9 and 10, or a  
pharmaceutically acceptable  
salt thereof, and a production thereof.  
ABFR Agent analgesique comprenant un compose de la formule generale (I), dans  
laquelle R1 et R2  
representent chacun un atome d'hydrogene ou un groupe hydrocarbure  
eventuellement substitue; R3  
represents un groupe alkyle inferieur; les cycles A et B peuvent  
eventuellement etre substitues; le  
cycle D est en outre substitue par un groupe hydroxyle eventuellement  
substitue et peut  
eventuellement etre substitue par un groupe oxo, une double liaison  
etant formee entre les positions  
8 et 9 ou entre les positions 9 et 10. L'invention se rapporte egalement  
a un sel pharmaceutiquement  
acceptable de ce compose, ainsi qu'a un procede de production de ce  
dernier.

=> d que 129

L5 1 SEA FILE=REGISTRY ABB=ON PLU=ON 26100-51-6/BI  
 L6 1 SEA FILE=REGISTRY ABB=ON PLU=ON "POLY-L-LACTIC ACID"/CN  
 L7 2 SEA FILE=REGISTRY ABB=ON PLU=ON L5 OR L6  
 L10 1 SEA FILE=REGISTRY ABB=ON PLU=ON 127514-57-2  
 L28 11 SEA FILE=HCAPLUS ABB=ON PLU=ON LECHEVALIERIA AERO? OR  
       LENTZEA CALIFORN? OR LENTZEA ALBID? OR CROSSIELLA CRYO? OR  
       LECHEVALIERIA FLAVA? OR LENTZEA VIOL? OR LENTZEA WAY? OR  
       CROSSIELLA CRYOPHIL?  
 L29 1 SEA FILE=HCAPLUS ABB=ON PLU=ON L28 AND (L7 OR L10 OR  
       POLYLACT? OR (POLY? OR RESIN?) (5A)?LACT?)

Synonymy  
L

Saccharothrix

=> d ibib abs hitind hitstr

L29 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 2001:65454 HCAPLUS  
 DOCUMENT NUMBER: 134:120267  
 TITLE: Saccharothrix for degradation of **polylactate resin**  
 INVENTOR(S): Tokiwa, Yutaka  
 PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan  
 SOURCE: Jpn. Tokkyo Koho, 6 pp.  
 CODEN: JTXXFF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

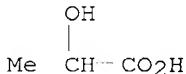
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 3128577	B1	20010129	JP 1999-313578	19991104
JP 2001128693	A2	20010515		
WO 2001032902	A1	20010510	WO 2000-JP2113	20000331
W: CA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
EP 1227158	A1	20020731	EP 2000-913053	20000331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI, CY				
JP 2001128667	A2	20010515	JP 2000-158973	20000529
JP 3326495	B2	20020924		
JP 2001128668	A2	20010515	JP 2000-158974	20000529
JP 3326608	B2	20020924		
JP 2001128669	A2	20010515	JP 2000-158975	20000529
JP 3326496	B2	20020924		
JP 2001128670	A2	20010515	JP 2000-158976	20000529
JP 3326497	B2	20020924		
JP 2001128671	A2	20010515	JP 2000-158977	20000529
JP 3326498	B2	20020924		
PRIORITY APPLN. INFO.:			JP 1999-313578	A 19991104
			WO 2000-JP2113	W 20000331
AB	Biodegradable <b>polylactate resin</b> is degraded with Saccharothrix. The method does not give waste gas, and is time-saving and useful for composting.			
IC	ICM C12P001-06			

CC ICS C12N001-20; C12S013-00  
 60-4 (Waste Treatment and Disposal)  
 ST **Saccharothrix polylactate resin** degrdn  
 IT Compost  
     *Crossiella cryophila*  
     *Saccharothrix*  
     *Saccharothrix aerocolonigenes aerocolonigenes*  
     *Saccharothrix australiensis*  
     *Saccharothrix coeruleofusca*  
     *Saccharothrix espanaensis*  
     *Saccharothrix flava*  
     *Saccharothrix longispora*  
     *Saccharothrix mutabilis mutabilis*  
     *Saccharothrix syringae*  
     *Saccharothrix texensis*  
     *Saccharothrix waywayandensis*  
     (Saccharothrix for degrdn. of **polylactate resin**)  
 IT **Resins**  
 RL: BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)  
     (**polylactate**; Saccharothrix for degrdn. of  
     **polylactate resin**)  
 IT 26100-51-6  
 RL: BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)  
     (**resin**; Saccharothrix for degrdn. of **polylactate resin**)  
 IT 26100-51-6  
 RL: BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)  
     (**resin**; Saccharothrix for degrdn. of **polylactate resin**)  
 RN 26100-51-6 HCAPLUS  
 CN Propanoic acid, 2-hydroxy-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 50-21-5

CMF C3 H6 O3



# Inventor Search

Afremova 10/089,120

March 3, 2004

L4 ANSWER 1 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 2001:65454 HCAPLUS  
DOCUMENT NUMBER: 134:120267  
TITLE: Saccharothrix for degradation of  
polylactate resin  
INVENTOR(S): Tokiwa, Yutaka  
PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan  
SOURCE: Jpn. Tokkyo Koho, 6 pp.  
CODEN: JTXXFF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 3128577	B1	20010129	JP 1999-313578	19991104
JP 2001128693	A2	20010515		
WO 2001032902	A1	20010510	WO 2000-JP2113	20000331
W: CA, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,				
PT, SE				
EP 1227158	A1	20020731	EP 2000-913053	20000331
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,				
IE, FI, CY				
JP 2001128667	A2	20010515	JP 2000-158973	20000529
JP 3326495	B2	20020924		
JP 2001128668	A2	20010515	JP 2000-158974	20000529
JP 3326608	B2	20020924		
JP 2001128669	A2	20010515	JP 2000-158975	20000529
JP 3326496	B2	20020924		
JP 2001128670	A2	20010515	JP 2000-158976	20000529
JP 3326497	B2	20020924		
JP 2001128671	A2	20010515	JP 2000-158977	20000529
JP 3326498	B2	20020924		
PRIORITY APPLN. INFO.:			JP 1999-313578	A 19991104
			WO 2000-JP2113	W 20000331

AB Biodegradable polylactate resin is degraded with Saccharothrix. The method does not give waste gas, and is time-saving and useful for composting.

IC ICM C12P001-06

ICS C12N001-20; C12S013-00

CC 60-4 (Waste Treatment and Disposal)

ST Saccharothrix polylactate resin degrdn

IT Compost

Crossiella cryophila

Saccharothrix

Saccharothrix aerocolonigenes aerocolonigenes

Saccharothrix australiensis

Saccharothrix coeruleofusca

Saccharothrix espanaensis

Saccharothrix flava

Saccharothrix longispora

Saccharothrix mutabilis mutabilis

Saccharothrix syringae

Saccharothrix texensis

Saccharothrix waywayandensis  
 (Saccharothrix for degrdn. of polylactate resin)  
 IT Resins  
 RL: BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)  
 (polylactate; Saccharothrix for degrdn. of polylactate resin)  
 IT 26100-51-6  
 RL: BPR (Biological process); BSU (Biological study, unclassified); REM (Removal or disposal); BIOL (Biological study); PROC (Process)  
 (resin; Saccharothrix for degrdn. of polylactate resin)

L4 ANSWER 2 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN  
 ACCESSION NUMBER: 1999:39850 HCAPLUS  
 DOCUMENT NUMBER: 130:143571  
 TITLE: Polylactic acid resin-  
 degradation bacteria and microbial  
 degradation of polylactic acid  
 plastic  
 INVENTOR(S): Tokiwa, Yutaka; Nagai, Naoko; Jikuya,  
 Hiroyuki  
 PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan;  
 Shimadzu Corp.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11004680	A2	19990112	JP 1997-160230	19970617
PRIORITY APPLN. INFO.:			JP 1997-160230	19970617

AB Bacillus subtilis, B. circulans, and B. stearothermophilus degrade  
 polylactic acid resin. Biodegrdn. of the polylactic acid plastics with  
 Bacillus was also shown. The bacteria are useful for manufg. org. acids  
 and compost from the polylactic acid plastics. The physiol. and morphol.  
 characteristics of these Bacillus were given.

IC ICM C12N001-20  
 ICS C12N001-20; B09B003-00; C08J011-04; C12R001-125; C12R001-09;  
 C12R001-07

CC 60-1 (Waste Treatment and Disposal)  
 Section cross-reference(s): 10, 16

ST Bacillus polylactate plastic degrdn; waste solid biodegrdn Bacillus

IT Waste plastics  
 (biodegrdn. of; polylactic acid resin-degrdn. bacteria and microbial  
 degrdn. of polylactic acid plastic)

IT Bacillus (bacterium genus)  
 Bacillus circulans  
 Bacillus stearothermophilus  
 Bacillus subtilis  
 Fermentation  
 (polylactic acid resin-degrdn. bacteria and microbial degrdn. of  
 polylactic acid plastic)

IT Plastics, processes  
 RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC  
 (Process)

(polylactic acid; polylactic acid resin-degrdn. bacteria and microbial  
degrdn. of polylactic acid plastic)  
IT 26100-51-6, Polylactic acid  
RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC  
(Process)  
(biodegrdn. of; polylactic acid resin-degrdn. bacteria and microbial  
degrdn. of polylactic acid plastic)

L4 ANSWER 3 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1998:256027 HCAPLUS  
DOCUMENT NUMBER: 129:2687  
TITLE: Polylactic acid resin-  
degradation bacteria  
INVENTOR(S): Tokiwa, Yutaka; Jikuya, Hiroyuki; Nagai,  
Naoko  
PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan;  
Shimadzu Corp.  
SOURCE: Jpn. Kokai Tokkyo Koho, 11 pp.  
CODEN: JKXXAF  
DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 2  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10108670	A2	19980428	JP 1996-262074	19961002
US 5925556	A	19990720	US 1997-942361	19971002
US 6066492	A	20000523	US 1999-233041	19990120
PRIORITY APPLN. INFO.:			JP 1996-262073	19961002
			JP 1996-262074	19961002
			US 1997-942361	19971002
AB	Polylactate-contg. plastics are degraded with <i>Staphylococcus hominis</i> or <i>S. epidermidis</i> . The physiol. and morphol. characteristics of these two bacteria were given. The bacteria are useful for disposal of plastic waste.			
IC	ICM C12N001-20 ICS C12N001-20; B09B003-00; C08J011-06; C12S013-00; C12R001-44; C12R001-45			
CC	10-2 (Microbial, Algal, and Fungal Biochemistry)			
ST	polylactate plastic degrdn <i>Staphylococcus</i>			
IT	<i>Staphylococcus hominis</i> (Polylactic acid resin-degrdn. bacteria)			
IT	Plastics, processes RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process) (polylactate-contg.; polylactic acid resin-degrdn. bacteria)			
IT	Compost <i>Staphylococcus epidermidis</i> (polylactic acid resin-degrdn. bacteria)			
IT	26100-51-6, Polylactic acid RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process) (degrdn. of resin contg.; polylactic acid resin-degrdn. bacteria)			

L4 ANSWER 4 OF 4 HCAPLUS COPYRIGHT 2004 ACS on STN  
ACCESSION NUMBER: 1998:256026 HCAPLUS

DOCUMENT NUMBER: 129:2686  
 TITLE: **Polylactic acid resin-degradation bacteria**  
 INVENTOR(S): **Tokiwa, Yutaka; Jikuya, Hiroyuki; Nagai, Naoko**  
 PATENT ASSIGNEE(S): Agency of Industrial Sciences and Technology, Japan; Shimadzu Corp.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10108669	A2	19980428	JP 1996-262073	19961002
US 5925556	A	19990720	US 1997-942361	19971002
US 6066492	A	20000523	US 1999-233041	19990120
PRIORITY APPLN. INFO.:			JP 1996-262073	19961002
			JP 1996-262074	19961002
			US 1997-942361	19971002
AB	Polylactate-contg. plastics are degraded with <i>Streptomyces violaceus</i> or <i>S. cyaneus</i> . The physiol. and morphol. characteristics of these two bacteria were given. The bacteria are useful for disposal of plastic waste.			
IC	ICM C12N001-20			
CC	ICS C12N001-20; B09B003-00; C08J011-06; C12S013-00; C12R001-465			
ST	10-2 (Microbial, Algal, and Fungal Biochemistry)			
IT	polylactate plastic degrdn <i>Streptomyces</i>			
IT	Compost			
	<i>Streptomyces</i>			
	<i>Streptomyces cyaneus</i>			
	<i>Streptomyces violaceus</i>			
	(polylactic acid resin-degrdn. bacteria)			
IT	Plastics, processes			
	RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process)			
	(polylactic acid resin-degrdn. bacteria)			
IT	26100-51-6, Polylactic acid			
	RL: POL (Pollutant); REM (Removal or disposal); OCCU (Occurrence); PROC (Process)			
	(degrdn. of; polylactic acid resin-degrdn. bacteria)			

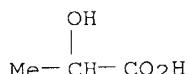
L5 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN  
 RN 26100-51-6 REGISTRY  
 CN Propanoic acid, 2-hydroxy-, homopolymer (9CI) (CA INDEX NAME)  
 OTHER CA INDEX NAMES:  
 CN Lactic acid, polymers (8CI)  
 OTHER NAMES:  
 CN (.-.)-2-Hydroxypropanoic acid homopolymer  
 CN (.-.)-Lactic acid homopolymer  
 CN (.-.)-Poly(lactic acid)  
 CN DL-Lactic acid homopolymer  
 CN DL-Lactic acid polymer  
 CN DL-Polylactic acid  
 CN Lactic acid homopolymer  
 CN Lactic acid polymer  
 CN Lactic acid, polyesters  
 CN Poly(dl-lactate)  
 CN Poly(dl-lactic acid)  
 CN Poly(DL-lactic acid)  
 CN Poly(lactic acid)  
 DR 31587-11-8  
 MF (C3 H6 O3)x  
 CI PMS, COM  
 PCT Polyester, Polyester formed  
 LC STN Files: ADISNEWS, AGRICOLA, BIOBUSINESS, BIOSIS, BIOTECHNO, CA,  
 CANCERLIT, CAPLUS, CASREACT, CBNB, CEN, CHEMCATS, CHEMLIST, CIN, DDFU,  
 DIOGENES, DRUGU, EMBASE, IFICDB, IFIPAT, IFIUDB, IPA, MEDLINE, PIRA,  
 PROMT, TOXCENTER, TULSA, USPAT2, USPATFULL, VETU  
 Other Sources: NDSL\*\*, TSCA\*\*  
 (\*\*Enter CHEMLIST File for up-to-date regulatory information)

## \*\*RELATED POLYMERS AVAILABLE WITH POLYLINK\*\*

CM 1

CRN 50-21-5

CMF C3 H6 O3



3962 REFERENCES IN FILE CA (1907 TO DATE)  
 140 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA  
 3982 REFERENCES IN FILE CAPLUS (1907 TO DATE)